

Serial No. 10/020,164

Attorney Docket No. 01-240

LISTING OF CLAIMS:

Claims 1-12 (Canceled)

13. (Currently amended) A terminal connected to a wire communication network for radio communication,

wherein said terminal includes at least one of transmitter means and receiver means,

wherein said transmitter means receives a first baseband signal in a particular format from said wire communication network, and modulates a carrier wave using the received first baseband signal into a transmission signal without translating the particular format of the first baseband signal into a different format,

wherein the transmission signal is transmitted via a transmitting antenna,

wherein said receiver means receives a signal via a receiving antenna, and demodulates the received signal into a second baseband signal,

wherein the second baseband signal is transmitted from said receiver means to said wire communication network without translating a format of the second baseband signal into a different format,

wherein said wire communication network includes an optical fiber link for transmitting a signal within said wire communication network,

wherein the first baseband signal received by said transmitter is an optical signal, and wherein the second baseband signal transmitted from said receiver means is an optical signal as in claim 12,

wherein said transmitter means includes a light controlled oscillator for generating the carrier wave of a predetermined nominal frequency,

Serial No. 10/020,164

Attorney Docket No. 01-240

wherein the first baseband signal received by said transmitter means is applied to said light controlled oscillator, and

wherein said light controlled oscillator generates, as the transmission signal, a signal of a frequency shifted from the predetermined nominal frequency according to an intensity of the applied first baseband signal.

14. (Canceled)

15. (Currently amended) A terminal connected to a wire communication network for radio communication.

wherein said terminal includes at least one of transmitter means and receiver means,

wherein said transmitter means receives a first baseband signal in a particular format from said wire communication network, and modulates a carrier wave using the received first baseband signal into a transmission signal without translating the particular format of the first baseband signal into a different format,

wherein the transmission signal is transmitted via a transmitting antenna,

wherein said receiver means receives a signal via a receiving antenna, and demodulates the received signal into a second baseband signal,

wherein the second baseband signal is transmitted from said receiver means to said wire communication network without translating a format of the second baseband signal into a different format,

wherein said wire communication network includes an optical fiber link for transmitting a signal within said wire communication network,

wherein the first baseband signal received by said transmitter is an optical signal, and

Serial No. 10/020,164

Attorney Docket No. 01-240

wherein the second baseband signal transmitted from said receiver means is an optical signal as in claim 12,

wherein said transmitter means includes a voltage controlled oscillator for generating the carrier wave of a predetermined nominal frequency and an optical/electrical converter,

wherein the first baseband signal received by said transmitter means is applied to said optical/electrical converter,

wherein said optical/electrical converter generates an electrical signal of a voltage variable with an intensity of the applied first baseband signal, and

wherein said voltage controlled oscillator receives the electrical signal and generates, as the transmission signal, a signal of a frequency shifted from the predetermined nominal frequency according to the voltage level of the received electrical signal.

16. (Currently amended) A terminal as in claim ~~12~~13,

wherein the receiver means includes a demodulator for demodulating the received signal into an electrical baseband signal and an electrical/optical converter, and

wherein said electrical/optical converter receives the electrical baseband signal and generates, as the second baseband signal, an optical signal of an intensity variable with an voltage of the received electrical baseband signal.

17. (Currently amended) A terminal as in claim ~~13~~14,

wherein said wire communication network to which said terminal is connected is an in-vehicle LAN established in a vehicle.

18. (Original) A terminal as in claim 17,

Serial No. 10/020,164

Attorney Docket No. 01-240

wherein said transmitting antenna is arranged on at least one of a front end, a rear end, a right side, and a left side of the vehicle, and

wherein said receiving antenna is arranged on at least one of the front end, the rear end, the right side, and the left side of the vehicle.

19. (Currently amended) A method for transmitting a signal in a predetermined format from a wire communication network to a radio device via radio waves, comprising the steps of:

modulating a carrier wave of a radio frequency using the signal into a transmission signal ~~without translating the predetermined format of the signal into another format in a~~
terminal as recited in claim 15; and

transmitting the transmission signal to said radio device.

20. (Currently amended) A method as in claim 19,

wherein said radio device is a second terminal connected to another wire communication network for radio communication.

21. (Original) A method as in claim 19,

wherein said radio device is a base station of a wireless communication network.

22. (Canceled)

23. (New) A terminal as in claim 15,

wherein the receiver means includes a demodulator for demodulating the received signal into an electrical baseband signal and an electrical/optical converter, and

Serial No. 10/020,164

Attorney Docket No. 01-240

wherein the receiver means includes a demodulator for demodulating the received signal into an electrical baseband signal and an electrical/optical converter, and

wherein said electrical/optical converter receives the electrical baseband signal and generates, as the second baseband signal, an optical signal of an intensity variable with an voltage of the received electrical baseband signal.

24. (New) A terminal as in claim 15,

wherein said wire communication network to which said terminal is connected is an in-vehicle LAN established in a vehicle.

25. (New) A terminal as in claim 24,

wherein said transmitting antenna is arranged on at least one of a front end, a rear end, a right side, and a left side of the vehicle, and
wherein said receiving antenna is arranged on at least one of the front end, the rear end, the right side, and the left side of the vehicle.

26. (New) A communication system comprising a wire communication network having at least one terminal as recited in claim 15 connected thereto.

27. (New) A terminal as in claim 15, wherein the predefined format is at least one of a frame format or a signal format.